

ANALISIS KETERSEDIAAN AIR MATAAIR UNTUK MEMENUHI KEBUTUHAN AIR DOMESTIK DI KECAMATAN KEJAJAR KABUPATEN WONOSOBO

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INTISARI

Mataair memiliki karakteristik hidrologi khusus dimana kemunculannya berada di daerah pegunungan. Kecamatan Kejajar merupakan daerah pegunungan sehingga banyak didapatkan mataair. Masyarakat Kecamatan Kejajar menggunakan sumberdaya air berupa mataair untuk memenuhi kebutuhan air domestik. Namun, besarnya kebutuhan domestik yang dipengaruhi pola kehidupan dan jumlah penduduk yang meningkat menyebabkan aktivitas manusia yang tinggi sehingga menyebabkan ketersediaan air dari mataair cenderung menurun. Tujuan penelitian ini adalah mengetahui karakteristik mataair berdasarkan kontinuitas dan debit mataair pada mataair di Kecamatan Kejajar, mengetahui ketersediaan air pada mataair di Kecamatan Kejajar, mengetahui kebutuhan air domestik saat ini dan proyeksinya hingga tahun 2030, 2040, 2050 di Kecamatan Kejajar serta menganalisis ketersediaan air mataair untuk memenuhi kebutuhan air domestik hingga tahun 2050 di Kecamatan Kejajar Kabupaten Wonosobo. Metode penelitian ini adalah metode survei dengan menggunakan sumber data primer dan sekunder. Sumber data primer diperoleh melalui survei lapangan meliputi pengamatan, pengukuran debit mataair, wawancara kebutuhan air domestik dan pencatatan hal penting. Sumber data sekunder diperoleh melalui instansi terkait dan publikasi ilmiah yang digunakan untuk mengetahui kebutuhan air domestik serta proyeksinya. Kecamatan Kejajar memiliki 34 mataair, seluruh mataair tersebut bersifat *perennial*. Berdasarkan klasifikasi debit Meinzer terdapat 2 mataair yang memiliki kelas IV, 29 mataair yang memiliki kelas debit V dan 3 mataair dengan kelas VI. Ketersediaan air mataair di Kecamatan Kejajar sebesar 4871365,92 m³/tahun. Kebutuhan air domestik di Kecamatan Kejajar berdasarkan wawancara dengan 114 responden menghasilkan sebesar 1435371,9 (m³/tahun) sedangkan sesuai SNI 6728-1-2015 sebesar 1572989,4 (m³/tahun). Potensi mataair di Kecamatan Kejajar secara kuantitas dalam perhitungan neraca air, terdapat 8 desa yang potensial untuk memenuhi kebutuhan air domestik di Kecamatan Kejajar selama tahun 2030, 2040 dan 2050.

Kata kunci : debit mataair, kebutuhan air domestik, ketersediaan air, mataair

ANALYSIS OF SPRING WATER AVAILABILITY TO FULFILL DOMESTIC WATER NEEDS IN KEJAJAR DISTRICT, WONOSOBO REGENCY

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ABSTRACT

Springs have special hydrological characteristics where they appear in mountainous areas. Kejajar District is a mountainous area so there are lots of springs. The people of Kejajar District use water resources in the form of springs to meet domestic water needs. However, the large domestic demand which is influenced by living patterns and the increasing population has led to high levels of human activity, causing the availability of water from springs to tend to decrease. The purpose of this research is to determine the characteristics of springs based on the continuity and discharge of springs in springs in Kejajar District, to determine the availability of water in springs in Kejajar District, to determine current domestic water needs and their projections until 2030, 2040, 2050 in Kejajar District and to analyze the availability of spring water. to meet domestic water needs until 2050 in Kejajar District, Wonosobo Regency. This research method is a quantitative method using primary and secondary data sources. Primary data sources were obtained through field surveys including observations, measuring spring discharge, interviews with domestic water needs and recording important matters. Secondary data sources were obtained through related agencies and scientific publications which were used to determine domestic water needs and their projections. There are 34 natural springs *perennial*. Based on the Meinzer discharge classification, there are 2 springs that have class IV, 29 springs that have discharge class V and 3 springs that have class VI. The availability of spring water in Kejajar District is 4871365,92 m³/year. Domestic water needs in Kejajar District based on interviews with 114 respondents were 1435371,9 (m³/year) while according to SNI 6728-1-2015 it was 1572989,4 (m³/year). The potential for springs in Kejajar District in terms of quantity in water balance calculations, there are 8 villages that have the potential to meet domestic water needs in Kejajar District during 2030, 2040 and 2050.

Keywords : spring discharge, domestic water demand, water availability, springs